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10/766,594	01/28/2004	Ling Tony Chen	13768.810.65	3876
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1000 EAGLE	GATE TOWER	BOND, CHRISTOPHER H		
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	,		3714	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			Application No.		Applicant(s)				
Office Action Summary		10/766,594		CHEN ET AL.					
		Examiner		Art Unit					
			Christopher H. Bon		3714				
Period fo	The MAILING DATE of this commun or Reply	nication appe	ears on the covers	heet with the co	orrespondence ad	idress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MINISTRY IN LONGER, FROM THE MINISTRY IN LONGER, FROM THE MINISTRY IN LONGER IN	MAILING DA s of 37 CFR 1.136 munication. tatutory period will y will, by statute, o	TE OF THIS COM 5(a). In no event, howeve Il apply and will expire SIX cause the application to be	MUNICATION or, may a reply be tim ((6) MONTHS from the come ABANDONED	l, ely filed he mailing date of this o) (35 U.S.C. § 133).	,			
Status									
1)⊠	Responsive to communication(s) file	ed on <i>28 Jai</i>	nuary 2004.						
	This action is FINAL . 2b) This action is non-final.								
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims								
4)🖂	4)⊠ Claim(s) <u>1-37</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) 🗌	Claim(s) is/are allowed.								
•	Claim(s) <u>1-37</u> is/are rejected.								
· ·	• • • • • • • • • • • • • • • • • • • •								
8)	Claim(s) are subject to restri	ction and/or	election requirem	ent.					
Applicat	ion Papers								
9) 🗌	The specification is objected to by th	ne Examiner	•						
10)⊠ The drawing(s) filed on <u>28 January 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)	The oath or declaration is objected t	o by the Exa	aminer. Note the a	ttached Office	Action or form P	ΤΟ-152.			
Priority (under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:									
,	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the Internation	onal Bureau	(PCT Rule 17.2(a)) .		,			
* (See the attached detailed Office action	on for a list o	of the certified cop	ies not receive	d				
Attachmen	t(s)								
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date									
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Inf					atent Application				
Paper No(s)/Mail Date 6) Other:									

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3, 16, 17, 19, 32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leen et al., USPAT 6,899,628 (Leen) in view of Knepfle et al., WO 200161601 A1 (Knepfle),
- 3. As to claims 1, 16, 17, 32 and 37, Leen presents a system and method for providing game event management to a user of an on-line gaming application and discloses (column 1, line 37 column 3, line 14), "... a system for providing enhanced services to users of a gaming application comprises a server and a platform remotely coupled to the server. The server executes a gaming application... a system for managing game events comprises a first server, a second server, a processor remotely coupled to the first server and the second server, and a memory coupled to the processor... a system for generating statistics information comprises a server, a processor remotely coupled to the server, and a memory coupled to the processor... a system for generating profile information for users of gaming application comprises a server, a processor remotely coupled to the server and a memory coupled to the processor... a system for generating profile information for users of gaming application comprises a server, a processor remotely coupled to the server and a memory coupled to the processor... The server further communicates first event information associated with a first game event, and communicates second event information associated with a second

game event. The processor receives the first event information and the second event information. The processor further generates profile information associated with the user based at least in part upon the first event information and the second event information. The memory stores the profile information...a system for determining the outcome of a wager associated with a gaming application comprises a server, a memory remotely coupled to the server, and a processor coupled to the memory. The server hosts a gaming application for a plurality of users, and monitors a plurality of game events during the execution of the gaming application. The server further communicates event information associated with at least one of the plurality of game events. The memory stores a plurality of wager records. At least one wager record is associated with a wager between a first user and a second user and comprises a plurality of wager parameters. The processor receives the event information during the execution of the gaming application, and determines the outcome of the wager based at least in part upon the event information and the wager parameters." Leen's invention stores game event information and uses this game event information to generate statistics, generate user profile information, and determine the outcome of an on-line game. This game event information could include a player/user rating.

Leen discloses all the limitations of these claims, except for a player rating. 4. Knepfle presents a community rating system for members of an online community and discloses (abstract), "...the community rating...of an individual reflects the individual in the electronic community, for example, feedback rating... as well as the reputations of the user the individual sponsors... and the reputations of each user they sponsor."

Knepfle further discloses (page 2) that, "A user's feedback rating is an indication of the user's reputation within the electronic community, and provides some indication of the trustworthiness and responsiveness of the user."

- 5. The advantage of such a feedback rating, Knepfle writes (page 2), is that, "Feedback ratings provide a good mechanism for indicating a level of... a user's trustworthiness or past participation within an electronic...forum.
- 6. This is evidence that one of ordinary skill in the art would have reason/motivation/suggestion to use a feedback rating in an online gaming environment for providing a good mechanism for indicating a level of a user's trustworthiness or past participation within an electronic forum.
- 7. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Leen with the feedback rating system as described by Knepfle for the purpose of indicating a user's trustworthiness or past participation within an electronic forum.
- 8. Furthermore, the method of determining an official result by way of: establishing a trust rating, storing the trust rating, updating the trust rating, and determining if the result is valid; and method of establishing a trust rating comprising the steps of: receiving results, establishing an initial trust, and modifying the trust rating of the player, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

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9. As to claims 3 and 19, the applicant's limitation of having a separate trust rating for a player for each online game title in which the player participates is akin to a user of Knepfle's invention leaving a feedback rating for each transaction. Knepfle discloses (page 5) that, "... a 'feedback rating,' which is a characteristic value based on feedback received from other users about a user relative to transaction conducted by the user, is one type of characteristic value of a user." One skilled in the art would recognize that a feedback rating is based on each, separate transaction made by the user, and substituting game participation for transactions would be an obvious modification of a feedback rating system.

- 10. Furthermore, the method of maintaining a separate trust rating for a player for each online game title, merely discloses the steps involved in the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.
- Claims 2, 4-12, 14-15, 18, 20-28, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leen in view of Knepfle and further in view of Michael Bacarella's "Anti-Cheat Mechanisms-Limited Trust in Online Gaming Communities (Bacarella).
- 12. Leen in view of Knepfle discloses all of the limitations of these claims, except for limitations involving a peer trust rating model where trust is increased or decreased for a player's positive or negative actions during or after an online gaming experience.
- 13. Bacarella discloses (Network of Trust Model, page 3) a rating system that works in the following manner: "Alice hereby takes a vow to never ever cheat. Trent, Alice's

friend, can vouch that Alice is a person of integrity, that he trusts Alice, and that he can verify that she's not cheating. In turn, Alice does the same for Trent. They have developed a trust relationship and publish this fact to a well known location. Bob also takes such a vow, and asks his friend Eve to do the same for him as Trent did for Alice, and vice versa. They too publish their newly formed trust relationship. Trent and Eve just happened to know each other, and already had a trust relationship, and therefore Alice and Bob, who have never met, if they ever check the trust database can determine that since they trust people that trust one another, that it would be safe for them to trust one another. In an online game, the server would handle this automatically and tell each player how trusted the other players are. The players can make a judgment call whether or not to continue playing on the trusted server... If a user with a high trust rating starts cheating and is caught, this would damage the trust rating of everyone who trusts him, reducing everyone's trustworthiness. Like in real life, when a member of a group comes under scandal, the remainder of the group will move to distance themselves from the member in question...This is more powerful than one may realize. If every player establishes a trust relationship with about 15 other players, most people will only be about 4-people-removed from one another in the trust network (which is enough to encompass about 50,000 players--a number typical of large gaming communities). Eight person displacement averaging 15 people each is enough to cover the population of the United States. Servers can resolve all of the trust relationships and display customized trust levels for each user. To free admins from the burden of dealing with cheat complaints, the admins could set a minimum required trust level to play on the server.

Other admins may choose to simply advise players that they're playing with untrusted players and leave it to the player to decide whether to keep playing on the server."

As to claims 2, 12, 14, 15, 18, 28, 30 and 31, in Bacarella and Knepfle, the trust 14. levels of users is dependent on the trust levels of others. Bacarella explains that a negative action—cheating--has a negative effect on the users associated with the cheater and decrease their trust ratings. Therefore, it would be obvious that a positive action—that is to say, all players reporting the same results, would have a positive effect on the users' trust ratings, and increase them. Conversely, a variation of this would include the opposite where if players are not reporting results, this would result in a negative rating for all players, as the system is only effective if the users are reporting results. Another variation of this might include using the results reported by a majority/non-majority of players, if all players report the same results, as the game's official result, if the players' trust level is greater than a predefined portion. This would meet the applicant's limitation of having required reporting for each game session. wherein trust ratings of the players are increased if all the players report the same results, and the applicant's limitation of having the processor execute machine instructions to reduce the trust rating of all players, if a predefined portion of players are not reporting results. This would also meet the applicant's limitation of having the processor execute machine instructions to use the results reported by a majority/nonmajority quorum as the game's official results, if the trust levels of the players is above a predefined level.

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15. Furthermore, the methods of requiring results for all players participating in a game and increasing the trust rating of all player, if the same results are reported by players in a game session; reducing trust ratings if a less than predefined portion of players report results; and using the results based on a majority/minority quorum where trust levels are above a predefined level, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

- 16. In regards to applicant's claims 4 and 20, Leen in view of Knepfle and further in view of Bacarella discloses the claimed invention except for changing the parameters in response to a condition detected by the server during a condition detected by the server. However, this would have been an obvious matter of design choice to change the parameters, since applicant has not disclosed that changing the trust-related parameters solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a system having different trust-related parameters used to calculate the overall trust rating. Bacarella's system already allows admins to set and customize the minimum trust levels, and Leen's invention is using other parameters to determine a game's outcome--obvious modifications to these parameters/levels would meet the applicant's limitation of having a processor change the parameters in response to a condition detected by the server.
- 17. Furthermore, the method of changing a parameter value in response to a condition detected during the game session, merely discloses the steps needed for the

rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

- 18. As to claims 5 and 21, Leen in view of Knepfle and further in view of Bacarella discloses the claimed invention except for a plurality of parameters for a player are defined by a corresponding plurality of different counters, wherein the machine instructions executed by the processor cause the processor to change the value of at least one of the plurality of parameters by incrementing or decrementing the counters. It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign counters to the parameters used to determine a player's trust rating, since it is commonly known in the art that a rating is something quantifiable, and thus usually defined by numbers. Hence, it would be necessary to increase/decrease the numbers (counters) associated with the parameters, if the parameters are used to define the overall trust rating.
- 19. Furthermore, the method wherein the plurality of parameters for a player are defined by corresponding counters, wherein the step of changing the value of the counters comprises decrementing/incrementing at least one of the counters, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.
- 20. As to claims 6, 7, 22 and 23, applying a weighting factor to the values of the counters stored for a player in determining the trust rating of the player would have been an obvious matter of design choice, since applicant has not disclosed that

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applying weighting factors to the parameters solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without the weighting factors. Furthermore, having at least one parameter with a greater weighting factor for tournament games would have also been obvious to one of ordinary skill in the art, since it is commonly known in the art that the stakes/outcomes are often higher of a higher value than those of regular, non-tournament games. Therefore, it would have been obvious to apply a greater weighting factor during tournament games to better regulate cheating and scrutinize trust levels.

- Furthermore, the methods of applying a weighting factor to a parameter and 21. applying a greater weighting factor to at least one of the parameters during a tournament game, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.
- In regards to claims 8, 24, and 33, the applicant's limitation of reducing the trust 22. rating for a player that starts a game session but does not complete a game session would have been an obvious limitation, as this is a common form of cheating--especially if loss is imminent. Bacarella proposes to decrease the trust rating of cheaters and the players associated with the cheater during an online gaming session, and since not finishing a game is a common form of cheating, it would have been an obvious modification well within one skilled in the art to modify Leen in view of Knepfle and further in view of Bacarella to incorporate this limitation.

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23. Furthermore, the methods of reducing the trust rating for a player who starts a game session, but does not complete a game session, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

- 24. Regarding claims 9, 25, and 34-36, one skilled in the art would recognize that cheating by denying service to peer players is a common form of online cheating. In keeping with Bacarella's proposal of reducing trust ratings for all those associated with a cheater or act of cheating, the applicant's limitation of reducing the trust rating of all players in a game if a player sends a signal using a less preferred protocol, because the player is unable to communicate using a signal with a preferred protocol, because the player may be experience packet flooding, would be an obvious modification of the proposed rating system of Bacarella.
- 25. Furthermore, the method of reducing the trust ratings of all players if a player sends a signal using a less than preferred protocol; the method of determining packet flooding; the method of determining packet flooding by way of a player sending a message to the gaming service using a less than preferred protocol; and determining if one player is using a filter to block communications with at least one player, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the methods would have been obvious in view of the device.
- 26. As to claims 10 and 26, Bacarella has proposed a rating system that penalizes all users in a game if cheating occurs. Conversely, rewarding all players by increasing

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their trust ratings when successful, cheat-free games occur would have been an obvious variation of the system proposed by Bacarella. This would meet the applicant's limitation of increasing the trust rating of all players participating in a game session if: a trusted majority report results; all results reported are in agreement; and no player has communicated with the game service using a signal with a less preferred protocol.

- 27. Furthermore, the method of updating and improving the trust rating of a player if all of the following are true: a trusted majority of players report results for the game session, all of the results are in agreement, and no player has communicated with the gaming service using a less than preferred protocol, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.
- 28. As to claims 11 and 27, since not reporting game results has been view as a negative action, it would have been obvious modification of the system proposed by Bacarella to reduce the trust ratings of individuals when the negative action of non-reporting occurs. This would meet the applicant's limitation of decreasing the trust ratings of all players in a game session when less than the trusted majority of player report results.
- 29. Furthermore, the method of reducing the trust rating of players if less than the trusted majority of players report results, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

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30. The advantage of having a peer trust rating for online gaming communities, Bacarella writes (Network of Trust Model, page 3), is that, "...such a system...is self-regulating...players would disassociated themselves from the cheater if they want to keep their standing."

- 31. This is evidence that one of ordinary skill in the art would have reason/motivation/suggestion to use a trust model based on peer relations and trust feedback, as it is self-regulating and would cause people to disassociated themselves from cheaters.
- 32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Leen in view of Knepfle with the trust rating model as proposed by Bacarella for the purpose of having a self-regulated system that causes players to disassociate themselves from cheaters.
- 33. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leen, in view of Knepfle and Bacarella, and further in view of Zacharia et al., "Collaborative Reputation Mechanisms in Electronic Marketplaces" (Zacharia).
- 34. As to claims 13 and 29, Zacharia discloses (page 2) eBay's rating and feedback system is calculated by giving buyers/sellers a +1, 0 or -1 score as feedback corresponding to a positive, neutral, or negative feedback respectively. The reputation value is calculated as the sum of these ratings over a period of 6 months. This would meet the applicant's limitation of having a rating system as a function of time, so that more recent updates have a greater weight in modifying the trust rating than previous update.

35. Furthermore, the method of changing the trust rating of a player as a function of time, merely discloses the steps needed for the rating system's operation, and since each step must be implemented in order to make the device, the method would have been obvious in view of the device.

- 36. The advantage of having a rating system factored as a function of time is that a player/seller/buyer who receives a negative feedback by an anomaly, irregularity, or through association with a cheater or bad seller/buyer, is that a player's overall rating will not be as affected a rating based on a straight average of feedback values, as these events will be washed out over a period of time. One who has a strong record of trust will only be marginally affected by occasional negative ratings. Conversely, those players that have a strong record of cheating, will clearly be illustrated to the rest of the community. This rating as a function of time algorithm has been long employed in many common systems including credit scoring and the traffic point system.
- 37. This is evidence that one skilled in the art would have reason/motivation/suggestion to use a rating system as a function of time for the purpose of allowing non-cheaters to improve their records if they do not have a history of cheating, or to better illustrate notorious cheaters.
- 38. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Leen in view of Knepfle and further in view of Bacarella with the time-dependent rating system proposed by Zacharia for the purpose of allowing non-cheaters to improve their records if they do not have a history of cheating or to better illustrate notorious cheaters.

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Citation of Pertinent Prior Art

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: David Becker, "Online gaming's cheating heart" and PR Newswire, "Games Can Now Play Unreal Tournament and Unreal Tournament 2003 Against Each Other To Win Money at Ultimate Arena'—as these addresses a trust reputations system for online gaming based on user feedback; Leen et al., USPAT 6,884,166; Overton, USPUB 2004/0242321; Buchegger, USPUB 2003/0163729; Yan et al., 'Security issues in online games'—as these pertain to online security issues/detection in online gaming systems; Sabater et al., 'REGRET: A reputation model for gregarious societies'; Sabater et al., 'Reputation and Social Network Analysis in Multi-Agent Systems; Pujol et al., 'Extracting Reputation in Multi Agent Systems by Means of Social Network Topology'; Mohtashemi et al., 'A Computational Model of Trust and Reputation'; Jordan et al., 'The Augmented Social Network: Building identity and trust into the next-generation Internet'—as these all address trust models for online exchanges between players/users; Patience, 'Epinions Launches Online Shopping Guide Build on Trust'; epinions.com 'The Web of Trust'; Zacharia et al., "Collaborative Reputation Mechanisms in Electronic Marketplaces—as these address trust issues/ratings in electronic marketplaces; Yeager et al., USPAT 7,203,753—as this relates to trust relationships in peer-to-peer networks; Gentles et al.; US 2004/0266533—as this addresses packet bombing/flooding detection and elimination

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H. Bond whose telephone number is (571) 272-9760. The examiner can normally be reached on M-F 9:30am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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